Membranes in Growth and Development

Edited by J.F. Hoffman, G.H. Giebisch and L. Bolis

Alan R. Liss; New York, 1982
622 pages. £75.00

Biologists at all levels now accept that the plasma membrane is very much more than just a 'bag' designed to enclose a cell's contents and maintain its osmotic integrity. Since the acceptance of the fluid-mosaic model for the structure of plasma membranes, much has been learned as to how, and to what end they function. Studies in all aspects of cell biology have indicated the numerous ways in which the plasma membrane controls cellular processes. This 91st volume of 'Progress in Clinical and Biological Research' aims to cover recent findings related to the role of the plasma membrane in cell growth and tissue development.

Being the proceedings of an international conference on biological membranes the book is made up of papers covering the myriad interests to which membrane biologists are applying their expertise. Although much of the work describes biochemical studies of membrane formation, particularly the biosynthesis of membrane proteins, there is a large section related to neural tissue and some interesting papers on the role of the plasmalemmal and extracellular matrix in tissue organisation.

At a glance the book may seem something of a mishmash of isolated papers. However, they are both well presented and referenced. As such, a glance at this book can introduce the membrane biologist to many of the diverse applications of the science.

Some knowledge of membrane biochemistry is expected and at £75.00 the reader will be obliged to find a library copy.

David Wraith

New Developments in Practical Virology

Edited by C.R. Howard

Allan R. Liss; New York, 1982
xiii + 343 pages. £39.40

This volume seeks to provide in one place, basic details of newer techniques currently employed in Experimental Virology. The selection was made on the basis of requests made by students attending the virological component of the M.Sc. course in Medical Microbiology at the London School of Hygiene and Tropical Medicine. Techniques of gene cloning have been specifically excluded since it was felt that adequate reference sources were available elsewhere.

The topics are wide ranging, extending from radioimmunoassay in diagnostic virology to hybridisation techniques and from peptide analysis of viral proteins to problems of virus containment. This inevitably raises the question of whether any one worker in the field would wish to seek information on more than a small proportion of the articles presented. This would seem to weaken the case for a 'one-place' reference source.

The opening chapter by Nermut reviews advanced methods in electromicroscopy with particular reference to cryotechniques, in whose development the author has played a major role. As always, his chapter is illustrated by some beautiful micro-